

WHAT IS CLAIMED IS:

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1. A method of inhibiting infection of a cell by a virus in a subject comprising the step of administering to said subject an inhibitor of HMG-CoA reductase.
2. The method of claim 1, wherein said subject does not have an existing viral infection.
- 10 3. The method of claim 2, wherein said subject is or will become immunosuppressed.
4. The method of claim 3, wherein said subject suffers from severe combined immunodeficiency.
- 15 5. The method of claim 3, wherein said subject is taking or will take immunosuppressive drugs.
6. The method of claim 5, wherein said subject is or will be a transplant recipient.
- 20 7. The method of claim 1, wherein said subject has an existing viral infection.
8. The method of claim 1, wherein said virus is selected from the group consisting of human immunodeficiency virus, human respiratory syncytial virus (RSV), parainfluenza virus, ebola virus, measles, canine distemper, Newcastle's Disease virus, bovine RSV, ovine RSV and turkey rhinotracheitis.
- 25 9. The method of claim 1, wherein said subject is a human.
- 30 10. The method of claim 9, wherein said virus is human immunodeficiency virus type 1.

11. The method of claim 9, wherein said virus is respiratory syncytial virus.

~~12. The method of claim 9, wherein said virus is human parainfluenza virus type 3.~~

5 13. The method of claim 1, wherein said inhibitor is selected from the group consisting of lovastatin, simvastatin, fluvastatin, atorvastatin, pravastatin and mevastatin.

10 14. The method of claim 1, further comprising administering to said subject an inhibitor of isoprenylation that is distinct from said HMG-CoA reductase inhibitor.

15 15. The method of claim 10, further comprising administering to said subject a nucleoside analog composition.

16. The method of claim 15, further comprising administering to said subject a protease inhibitor.

20 17. The method of claim 11, further comprising administering to said subject an antibody composition that binding immunologically to RSV.

18. The method of claim 11, further comprising administering to said subject ribavarin.

25 19. The method of claim 1, wherein said subject is a non-human mammal.

20. The method of claim 19, wherein said non-human mammal is a livestock animal.

30 ~~21. A method of inhibiting infection of a cell by a virus in a subject comprising the step of administering to said subject an inhibitor of isoprenylation.~~

22. The method of claim 21, wherein said subject does not have an existing viral infection.
- 5 23. The method of claim 22, wherein said subject is or will become immunosuppressed.
24. The method of claim 23, wherein said subject suffers from severe combined immunodeficiency.
- 10 25. The method of claim 23, wherein said subject is taking or will take immunosuppressive drugs.
26. The method of claim 25, wherein said subject is or will be a transplant recipient.
- 15 27. The method of claim 21, wherein said subject has an existing viral infection.
28. The method of claim 21, wherein said virus is selected from the group consisting of human immunodeficiency virus, human respiratory syncytial virus (RSV), parainfluenza virus, ebola virus, measles, canine distemper, Newcastle's Disease virus, bovine RSV, ovine RSV and turkey rhinotracheitis.
- 20 29. The method of claim 21, wherein said subject is a human.
30. The method of claim 29, wherein said virus is human immunodeficiency virus type 1.
- 25 31. The method of claim 29, wherein said virus is respiratory syncytial virus.
32. The method of claim 29, wherein said virus is human parainfluenza virus type 3.
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33. The method of claim 21, wherein said inhibitor is selected from the group consisting of L-739,749, L-744,832, SCH 44342 (1-(4-pyridylacetyl)-4-(8-chloro-5,6 dihydro-1H benzo [5,6] cyclohepta [1,2-b]pyridin-11-ylidene) piperidine), BZA-5B, FTI-276 and B1086.
- 5 34. The method of claim 21, further comprising administering to said subject an inhibitor of HMG-CoA reductase that is distinct from said isoprenylation inhibitor.
- 10 35. The method of claim 30, further comprising administering to said subject a AZT composition.
36. The method of claim 35, further comprising administering to said subject a protease inhibitor.
- 15 37. The method of claim 31, further comprising further comprising administering to said subject an antibody composition that binding immunologically to RSV.
38. The method of claim 32, further comprising further comprising administering to said subject ribavarin.
- 20 39. The method of claim 21, wherein said subject is a non-human mammal.
40. The method of claim 39, wherein said non-human mammal is a livestock animal.
- 25 41. A composition comprising:
- (a) an HMG-CoA reductase inhibitor; and
- (b) an antiviral drug.
- 30 42. The composition of claim 41, wherein said inhibitor is lovastatin, simvastatin, fluvastatin, atorvastatin, pravastatin and mevastatin.

42. The composition of claim 41, wherein said inhibitor is lovastatin, simvastatin, fluvastatin, atorvastatin, pravastatin and mevastatin.
- 5 43. The composition of claim 41, wherein said antiviral drug is a nucleoside analog, a protease inhibitor, a non-nucleoside reverse transcriptase inhibitor, and integrase inhibitor or a viral entry inhibitor.
44. A composition comprising:
- 10 (a) an isoprenylation inhibitor; and
(b) an antiviral drug.
45. The composition of claim 44, wherein said inhibitor is selected from the group consisting of L-739,749, L-744,832, SCH 44342 (1-(4-pyridylacetyl)-4-(8-chloro-5,6 dihydro-1H benzo [5,6] cyclohepta [1,2-b]pyridin-11-ylidene) piperidine), BZA-5B, FTI-276 and B1086.
- 15 46. The composition of claim 44, wherein said antiviral drug is a nucleoside analog, a protease inhibitor, a non-nucleoside reverse transcriptase inhibitor, and integrase inhibitor or a viral entry inhibitor.
- 20 47. A method of preventing the emergence of viral resistance in a subject comprising administering to said subject a combination drug therapy, wherein one of said drugs is an inhibitor of HMG-CoA reductase.
- 25 48. A method of preventing the emergence of viral resistance in a subject comprising administering to said subject a combination drug therapy, wherein one of said drugs is an inhibitor of isoprenylation.

49. A method of treating a drug-resistant viral infection in a subject comprising administering to said subject a combination drug therapy, wherein one of said drugs is an inhibitor of HMG-CoA reductase.
- 5 50. A method of treating a drug-resistant viral infection in a subject comprising administering to said subject a combination drug therapy, wherein one of said drugs is an inhibitor of isoprenylation.

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